

ABSTRACT

An electric current detector is provided wherein loose arrangement of conductor 6 in opening 5 provides an air gap between the conductor 6 and plastic package 4 in opening 5 to prevent close contact of conductor 6 to plastic package 4. When heat and heat stress are produced in conductor 6 by a large electric current flowing through conductor 6 during measurement, air gap surely prevents heat and heat stress from traveling to Hall effect sensor 2 and plastic package 4 while a part of heat in conductor 6 is radiated into air in opening 5. Thus, the loose arrangement of conductor 6 can restrict or reduce deterioration of electric property in Hall sensor 2 and degradation of mechanical property in plastic package 4 by heat and heat stress in conductor 6. Also, the loose arrangement ensures and facilitates attachment of the detector 1 in position on a surface of a substrate, and enables to maintain conductor 6 at the same level as lead terminals 3 of the detector.